

United Engineering Company Shipyard,
Bending Shop and Oven
(Building No. 20)
2900 Main Street
Alameda
Alameda County
California

HAER No. CA-295-L

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
San Francisco, California

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HISTORIC AMERICAN ENGINEERING RECORD

UNITED ENGINEERING COMPANY SHIPYARD, BENDING SHOP AND OVEN (Building No. 20)

HAER No. CA-295-L

Location: 2900 Main Street
Alameda
Alameda County
California

U.S.G.S. 7.5 minute Oakland West, Calif. quadrangle.
Universal Transverse Mercator Coordinates: 10.562530.41842610

Significance: The bending shop and oven (building no. 20) is a contributing structure in the United Engineering Company Shipyard historic district that has been determined eligible for the National Register of Historic Places. The United Engineering Company Shipyard, established in 1941 to build and repair ships for the U.S. Navy, is the last surviving of several large World War II shipyards in Alameda. United Engineering built 21 tugboats and repaired hundreds of ships during the war. The facility was one of the largest employers in Alameda and played an important economic and social role in the city. As part of a complex with building no. 19 and a demolished furnace between the two buildings, this building played a basic industrial function in the shipyard.

Description: The bending shop and oven is located to the southwest of the engineering building and north of the large Inspection and Repair Shops building in the Alameda Gateway complex. The bending shop and oven is nearly identical to a second bending shop, which is located to the north. The structure is a one-story generally rectangular-shaped building. The shop measures 48 feet across the east and west sides and 34 feet across the north and south ends. The structure has a total area of approximately 1600 square feet. Like many of the buildings constructed at the yards from 1941-1945, the Bending Shop is utilitarian in appearance and has no ornamentation.

The building's walls rest on a foundation of wooden beams, and its vertical posts sit on concrete bases. The shop is composed of a heavy wooden post-and-beam structural system with wooden horizontal braces. Heavy wooden trusses support the roof. The main roof is gabled with a full-length lean-to on the east side and one smaller lean-to on the north end — a second lean-to on the north end has been removed (see plan). There are several vents on the roof. The exterior walls, main roof, and lean-to roofs are all covered with corrugated,

galvanized, iron siding. Hoisting beams project from each end of the building.

The roof trusses are arranged so that the center of the shop is open for a crane bay to run the length of the building. The iron rail runs along the underside of the ridge beam. A second crane rail runs from the center of the building to the doors on the west side. The cranes have been removed from the rails. The large opening on the west side has a pair of doors that are framed with wood and covered with corrugated iron.

The interior of the shop is a large open space. The walls and ceiling are unfinished, with exposed structural members. The building does not have any windows and is lit with what appear to be the original hanging incandescent lights. In addition, the south end is open, providing access and additional light. Original plans show the floor was a concrete slab with a leveling plate on top. The plate has been removed and the slab has either been removed or covered with dirt.

Aside from the removal of the crane and lean-to, the bending shop appears little altered.

Historical Context:

The two bending shops, building no. 19 and no. 20, were built in 1941 during a construction campaign by United Engineering. The company quickly built numerous buildings to accommodate shipbuilding and repair necessitated by U.S. involvement in World War II.

The buildings first appeared on a plan of 22 October 1942 as a related complex identified as "angle-slab, furnace and punch". Between the two buildings was a furnace and southeast of the south building was a punch. A June 1943 site plan identified the two buildings as "bending slabs", a term that remained in use at least as late as 1970. When Matson Navigation sold the property to Todd Shipyard Corporation in 1959, the complex of bending slabs and furnace was labeled no. 12. The 1948 Sanborn map identified the buildings as flange shops and labeled no. 11. By the time the Todd Shipyards Corporation sold the property to Alameda Gateway in 1984, the complex of buildings and furnace was labeled no. 72. Building 20 is currently used for storage.

Sources:

Alameda County Recorder. Exhibit B: Description of Buildings, Waterfront Improvements, Shipyard Utilities, Machinery and Equipment. 18 February 1970. RE: 2568, IM 80-82.

Alameda County Recorder. Grant Deed. Matson Navigation Company to Todd Shipyards Corporation 6 March 1959, including List of Buildings, Fixtures, and Improvements.

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Alameda Gateway. *Existing Site Plan*. 30 January 1984.

Froberg, Alben, Architect. *Bending Shop and Oven*. Alameda, CA: United Engineering Co., Ltd., Alameda Shipyard, Ship Repair Facilities, 15 December 1941.

Kennedy, Clyde C., Engineering Office of. "Area Plan and Interceptor Profile: Improvements to Sewer System for Properties Occupied by Todd Shipyards Corp., Alameda, Calif." Prepared for Matson - United Properties, Inc. 9 August 1951.

Sanborn Map Company. *Insurance Maps of Alameda, California*, p. 93. New York: 1948.

Thompson, Richard G., Lieutenant Colonel, San Francisco District, Corps of Engineers. Letter to Cheryl Widdell, State Historic Preservation Officer, requesting Determination of Eligibility. 30 April 1998.

United Engineering Company Ltd. *Alameda Shipyard, San Francisco Area*, Sketch No. 48. 10 February 1944.

United Engineering Company Ltd. *Alameda Shipyard: Map Showing Existing Facilities and Those Under Construction*. 22 October 1942.

United Engineering Company Ltd. *Map of Alameda Shipyard Showing Existing and Proposed Additional Facilities*. Plan no. UEC-A-1-7. 14 June 1943.

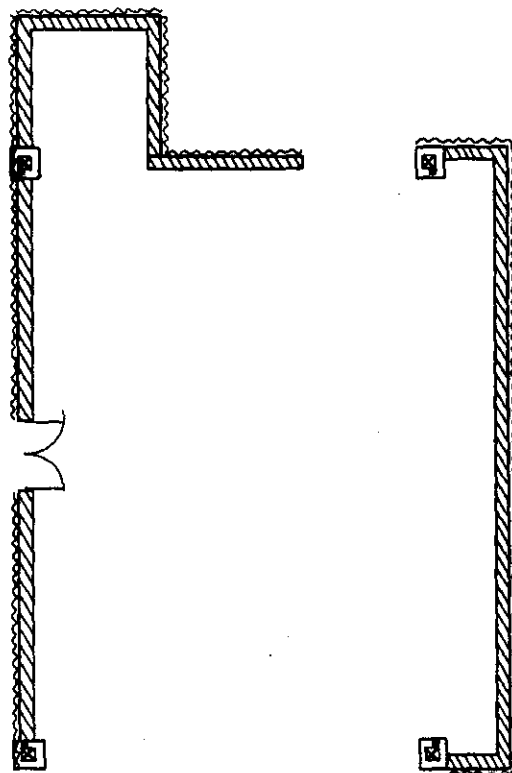
United States. Army Corps of Engineers - San Francisco District and California. State Historic Preservation Officer. Memorandum of Agreement Regarding the Oakland Harbor Navigation Improvements Project, Alameda County, California. Signed 31 January 2001 and 22 January 2001.

Widdell, Cheryl, State Historic Preservation Officer. Letter to Richard G. Thompson, Lieutenant Colonel, San Francisco District, Corps of Engineers, Regarding Oakland Harbor Ship Channel Deepening and Improvements, Alameda County [Determination of Eligibility Concurrence]. 9 June 1998.

Project Information: This report was prepared for the U.S. Army Corps of Engineers and the Port of Oakland in accordance with a Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, San Francisco District and the California State Historic Preservation Officer concerning the former United Engineering Company shipyard. The Port of Oakland and the City of Alameda were concurring parties to the MOA. The MOA was created because of a proposal by the U.S. Army Corp of Engineers in partnership with the Port of Oakland to sponsor the Oakland Harbor Navigation Improvements Project. This project "would deepen Oakland Harbor channels and berth areas from -42 feet mean lower low water (MLLW) to -50 feet MLLW, with 2 feet overdredge allowance" and widen some portions of the channels. These actions, which would constitute an Undertaking under Section 106, would result in the demolition of several buildings and structures at the former United Engineering Company Shipyard. Because the shipyard had been determined eligible for the National Register of Historic Places, the Undertaking would have an adverse effect on the property. Under the MOA, the following HAER documentation has been prepared: a written historic and descriptive report on the shipyard as a whole, seventeen separate reports on individual buildings and structures in the shipyard, including this report, and photographic documentation.

This building will not be demolished by the federal undertaking.

This report was prepared by Jody Stock, architectural designer, and Michael R. Corbett, architectural historian. Corbett was a subcontractor to Basin Research Associates of San Leandro. Basin Research was under contract to g. borchard & associates.



**BUILDING NO. 20: BENDING SHOP AND OVEN
(BUILDING 72T)**



NORTH

0 2 4 8 12

Prepared by Jody R. Stock
12/12/00

*Plan is based on scaled drawing, Alben Froberg, Architect, *Bending Shop and Oven* (Alameda, CA: United Engineering Co., Ltd., Alameda Shipyard, Ship Repair Facilities, 15 December 1941). The plan has been altered to reflect current field conditions. When constructed, the building was open to the exterior. The walls (which have been added after the 1941 plan) are indicated with hashmarks and are not to scale.